

## The Health of New Hampshire's Community Hospital System

## A Financial and Economic Analysis

# Section III – Assessing the Competitiveness of New Hampshire's Health Care Markets: A Focus on Hospitals <u>Executive Summary</u>









## **SECTION III**

# Assessing the Competitiveness of New Hampshire's Health Care Markets: A Focus on Hospitals

## **Executive Summary**

Center for Health Economics Research

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Done In Cooperation with
New Hampshire Department of Health and Human Services
New Hampshire Department of Insurance
New Hampshire Office of the Attorney General
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# Assessing the Competitiveness of New Hampshire's Health Care Markets: A Focus on Hospitals

## **Executive Summary**

## **History of the New Hampshire Health Plan**

In 1995, in response to changes in the health care system, the Department of Health and Human Services (DHHS) drafted legislation that was approved and signed into law that directs the Department to prepare "a comprehensive and coordinated system of health and human services as needed to promote and protect the health, safety and well-being of the citizens of New Hampshire." (RSA 126A) The Department responded by creating a statewide Health Care Planning Process, the goal of which was to develop a New Hampshire State Health Plan. Four years after its inception, the Health Care Planning Process entered its initial implementation phase, and DHHS contracted with staff at the Center for Health Economics Research (CHER) in Waltham, Massachusetts to study the structure and performance of the health care markets in New Hampshire.

## **Scope and Purpose of the Project**

The project's principal research agenda consisted of three separate components.

The first component was to determine the overall competitiveness of the New Hampshire health care markets. This task involved the following preliminary steps:

• defining what competition in health care means,

- describing the strengths and limitations of competition in health care,
- creating a set of indicators to measure competition,
- characterizing the provider and insurer markets in New Hampshire,
- measuring competition in the state's provider and insurer markets, and
- analyzing changes in competitiveness in New Hampshire over time.

Having identified the extent of competition in New Hampshire's health care markets, the second component was to evaluate the effects of competition on the performance of the provider and insurer markets. This task involved measuring the impact of market concentration on the following performance domains:

- provider costs, prices and profits,
- insurance premiums,
- formation of integrated provider networks,
- access to health care services.
- service utilization, and
- health care outcomes.

The third major component was to develop an information system that could be used to monitor and evaluate the competitiveness of the state's health care markets in the future. This assignment required us to:

- create a set of standardized indicators that can be used to measure competition,
- create a set of standardized measures that can be used to evaluate the effects of market competition, and
- design an information system that can be used for monitoring and evaluating changes in health care markets.

The initial scope of work was eventually narrowed by focusing on the hospital sector. A hospital focus proved necessary because the data required to conduct an impact

analysis on other sectors of the health care system (e.g., insurers, physicians, community health care centers, nursing homes, etc.) were simply not available. Only the hospital sector offered sufficient, consistent and reliable information to study its structure, conduct, and performance in a rigorous manner. At the same time, the scope of the study was broadened by taking into account a much fuller range of structure and conduct characteristics than were originally considered. Most measures of competition or market share fail to capture important horizontal linkages among hospitals, vertical linkages among hospitals and insurers that influence performance — all of which will play a critical role in determining the competitiveness and performance of the health care system.

## **Major Findings of the Study**

The major findings of the study are divided into two sets: those relating to hospital market structure and those highlighting hospital conduct and performance. The main findings regarding the **structure of hospital markets** can be summarized as follows:

- Most New Hampshire hospitals enjoy very strong market positions in their local geographic and service markets. The typical hospital treats over half of the inpatient admissions in its market. In 1998, five hospitals controlled over 70 percent of their markets' inpatient admissions. (See Pie Charts and Map 4-1.)
- Primary and hospital outpatient service markets tend to be more concentrated than tertiary and secondary care service markets. The typical hospital outpatient market is characterized by a single provider controlling over three-quarters of all hospital outpatient visits. (See Map 4-3.)
- Most hospital markets in New Hampshire are small and non-overlapping, with a low population density. (See Map 4-1.)

- Many hospitals exhibit low occupancy rates, especially smaller ones competing with a dominant hospital in its market. The average unweighted hospital occupancy ratio in 1998 was 48 percent. Twelve of the 26 hospitals in New Hampshire had only one-third of their beds filled on any given day in 1998. (See Table 4-1.)
- Markets in the central, southern and seacoast regions of the state have more competitors. But admissions in these markets remain concentrated in a single dominant hospital.

The main findings of the report regarding the **conduct and performance of hospitals** in New Hampshire can be summarized as follows:

- Hospitals in New Hampshire exhibit the lowest average costs in the region. Average casemix and wage adjusted costs per discharge in New Hampshire in 1998 were \$6,404, compared with \$7,060 regionally and \$6,702 nationally. (See Table 7-1.)
- A few smaller hospitals exhibited average costs in excess of \$8,000 in 1998, well above the state, regional and national averages. (See Table 7-4.)
- Hospitals are generating relatively higher margins (net gains or losses divided by total payment) from private payers. Hospital margins from private payers in New Hampshire were 9.7 percent in 1998, compared with 6.1 percent regionally and 5.5 percent nationally. (See Table 7-2.)
- Average net revenues (excess of payment over costs) in New Hampshire were the second lowest in the region. In 1998, average net revenue in New Hampshire adjusted for casemix and wage differences was \$6,372, compared with \$6,711 regionally and \$6,509 nationally. (See Table 7-1.)
- Most hospitals in New Hampshire have been enjoying relatively high annual net incomes and exhibit remarkably solid balance sheets. In 1998, hospitals in New Hampshire enjoyed an average total margin (total revenues over total expenses) of 6.9 percent, compared with 4.5 percent regionally and 5.8 percent nationally. (See Table 7-1.)
- In 1998, New Hampshire hospitals exhibited losses on their Medicaid and Medicare patients of approximately two percent each. They also posted losses on uncompensated care (bad debt plus free care) of slightly over five percent. These losses on publicly insured patients and uncompensated care were offset by positive profits on privately insured patients and by income from accumulated savings. (See Table 7-2.)

- Hospitals have created a variety of horizontal and vertical linkages with providers that may potentiallserve to reinforce market concentrations. (See Tables 6-1, 6-2, and 6-3)
- Managed care penetration remains relatively low in most markets in New Hampshire. The HMO share of discharges across hospital markets in 1998 was 20 percent, ranging from near zero in some northern markets to half of all discharges in the less concentrated markets in the southern regions of the state. (See Table 6-5.)
- Hospitals appear to have been successful in avoiding the discounts and risk sharing arrangements typically associated with managed care plans. While HMO share of admissions ranged from 20 to 50 percent for some markets, the actual share of hospital revenue exposed to risk sharing or capitated contracts was less than 10 percent on average. (See Table 6-5.)

## **Major Conclusions**

Based on the findings of the report with regard to the structure, conduct and performance of New Hampshire hospitals, we draw the following major conclusions:

- Many hospitals in New Hampshire are 'natural monopolies' due to their geographic dispersion and the low population density in most areas. As such, they exhibit substantial efficiency gains through larger size with smaller providers at a financial cost disadvantage. They also appear to enjoy considerable power in determining payments if they choose to exercise it.
- Most markets are segmented with smaller facilities treating less complicated cases and more complex cases flowing naturally to the few larger tertiary facilities in the state. This natural market segmentation creates further efficiencies in the allocation of resources across hospitals in the state.
- Most hospitals do not appear to be competing for patients through the purchase of expensive and duplicative equipment, but rather triage more complex patients to regional care centers.
- A few smaller community hospitals with low occupancy rates in otherwise concentrated markets are relatively costly, yet do not appear to be at risk of closing.
- Most New Hampshire hospitals appear to be using their positive net revenues from private payers to cross-subsidize losses on public payers and the uninsured.

- Hospitals appear to have sufficient net revenues to support more charity care, though demand for charity care varies across hospital markets. (See Table 7-6)
- Hospitals could reduce markups to private payors without risking provision of free care or exiting the market through bankruptcy. (See Table 7-6)

## **Policy Implications**

## **Promoting Supply-Side Competition**

Based on these conclusions, promoting supply-side competition is unlikely to lower privately contracted 'prices' significantly due to providers' potential market power. Despite New Hampshire hospitals deriving higher gains from commercial payers, simply adding more local care alternatives will not guarantee lower 'prices' for many patients and insurers. Local demand is too sparsely distributed to support more acute facilities, as evidenced by the already small bedsizes and occupancy rates of many of the state's acute care facilities.

Furthermore, distributing volumes to other providers is likely to have four undesirable impacts. These are:

- First, procedure volumes per provider, already relatively low in some facilities, will fall, endangering quality and raising costs further. Minimum quality levels dictate reasonably sized institutions that can financially support the range of costly diagnostic and therapeutic equipment necessary to modern acute medicine. In addition, surgicenters would certainly be less costly than acute facilities for the procedures they perform, and their entry into the market should drive down prices for similar procedures performed in nearby acute facilities. But their effect on acute care providers would most likely be higher average costs for non-surgical and more complex surgeries.
- Second, non-profit hospitals will likely feel forced through competition to regain revenues or reduce costs by reducing care, by encouraging readmissions, and/or by upcoding diagnoses for DRG payment. Reducing care has quality implications.

- Third, supply-side competition may induce hospitals to cut back on free care when volumes and revenues are threatened. If competition were to come from new acute facilities or surgicenters, neither of these groups could be expected to provide much, if any, charity care -particularly as start-up operations. Policy makers should expect some negative response to heightened competition in restricted access to acute inpatient and outpatient institutional care among the under- and uninsured.
- Fourth, heightened supply-side competition may result in closures and possibly unstable access to care. A natural outcome of competition is market exit, not just lower prices. Heightened competition could drive out a provider located in a poorer community with more uninsured. This may be "efficient" from an industry perspective but not optimal from a societal perspective given that health care is valued by all. The trade-off between competitive efficiency and access can be severe in more rural states like New Hampshire where the population is sparsely distributed and terrain and weather are serious factors affecting access to care.

## Promoting Demand-Side Competition through Managed Care

Managed care can redress market failures in two ways. First, by overseeing the care patients receive, managed care can reduce unnecessary care and lower payer costs. Second, by representing a large number of subscribers, managed care can consolidate their market power and negotiate lower prices with providers. Yet, without state intervention, managed care is unlikely to instill greater competition in most New Hampshire markets. HMOs will have difficulty negotiating anything other than minor price discounts with most providers given the concentrated hospital market structure and the networks and alliances these providers have entered. This is true even in the Seacoast and Southcentral markets of Manchester and Nashua. At best, six to eight hospitals might be candidates for instilling price competition through HMO activity. The rest of the providers appear to be too dispersed or serving very different kinds of patients to be targets for managed care.

## **Community-Based Solutions**

If the promotion of supply- or demand-side solutions holds little promise for dealing with problems in the market, then non-market interventions should be considered. In most other States, government is the only non-market intervention that can be employed. Fortunately, New Hampshire – through its community benefits legislation SB 69 - has created an opportunity for communities to act as the first and perhaps only place that these questions need to be resolved. The community benefits legislation requires that by 2001 all non-profit health care providers with \$100,000 or more in their total fund balance must complete a needs assessment of the communities that they serve, conduct meetings with those communities to discuss what the provider has done in the past to meet community needs and what it plans to do in the future and then submit that plan to the Attorney General's Office. The point at which hospitals sit down with individuals from their communities to discuss the hospitals' provision of community benefits is an ideal first line venue for reviewing the issues raised above.

## **Areas of Future Research**

This project constitutes one of the first extensive investigations of the structure of the New Hampshire hospital industry and the extent to which the system is meeting both the private and social objectives. Future research should:

- continue to monitor the hospital industry, particularly in light of the
  potentially significant impact that the community benefits legislation
  may have on the industry;
- place the behavior of the hospital sector in the larger context of total state health care expenditures;

- analyze physician services and their linkages with other providers; and
- analyze the health insurance and health maintenance organization market.

## **TABLES**

From:

Executive Summary - Assessing the Competitiveness of New Hampshire's Health Care Markets: A Focus on Hospitals

Center for Health Economics Research for the Office of Planning and Research, New Hampshire Department of Health and Human Services; December, 2000

Table 4-1
Profile of New Hampshire's 26 Acute Care Hospitals

Hospital Name	Town	Region	Share of Discharges	Number of <u>Discharges</u>	Number of Beds	Patient Days	Occupancy <u>Ratio*</u>	Teaching <u>Affiliation</u>	Ownership	Patient Casemix		of Total Dis Type of Pa	0
											Medicare.	Medicaid	Self-Pay
Alice Peck Day Memorial Hospital	Lebanon	Central Western	0.79%	902	32	2,515	22%	No	Non-Profit	0.79	26%	6%	3%
Androscoggin Valley Hospital	Berlin	North Country	1.74	1,988	64	13,386	57%	No	Non-Profit	0.95	56	15	5
Catholic Medical Center	Manchester	Central	7.04	8,032	213	50,798	65%	No	Non-Profit	1.92	54	7	5
Cheshire Medical Center	Keene	Southwestern	4.72	5,377	141	27,033	53%	No	Non-Profit	1.04	43	10	5
Concord Hospital	Concord	Central	9.29	10,590	176	44,795	70%	Yes	Non-Profit	1.20	34	7	4
Cottage Hospital	Woodsville	North Country	0.90	1,025	34	4,549	37%	No	Non-Profit	1.14	56	11	4
Elliot Hospital	Manchester	Central	11.29	12,877	225	45,241	55%	No	Non-Profit	0.93	25	11	4
Exeter Hospital, Inc.	Exeter	Seacoast	4.17	4,756	80	15,520	53%	No	Non-Profit	1.05	33	8	5
Franklin Regional Hospital	Franklin	Central Eastern	1.45	1,659	49	6,547	37%	No	Non-Profit	0.95	55	13	4
Frisbie Memorial Hospital	Rochester	Seacoast	3.09	3,519	70	13,904	54%	No	Non-Profit	0.93	43	16	4
Huggins Hospital	Wolfeboro	Central Eastern	1.44	1,642	55	10,974	55%	No	Non-Profit	0.99	52	10	3
Lakes Region General Hospital	Laconia	Central Eastern	4.35	4,955	117	24,943	58%	No	Non-Profit	1.08	43	11	5
Littleton Hospital	Littleton	North Country	1.46	1,670	49	4,575	26%	No	Non-Profit	0.96	39	9	6
Mary Hitchcock Memorial Hospital	Lebanon	Central Western	15.24	17,373	322	86,671	74%	Yes	Non-Profit	1.57	35	8	4
Memorial Hospital	North Conway	Central Eastern	1.40	1,594	35	6,030	47%	No	Non-Profit	0.90	38	14	6
Monadnock Community Hospital	Peterborough	Southwestern	1.80	2,056	62	8,370	37%	No	Non-Profit	0.78	32	8	4
New London Hospital Assoc.	New London	Central Western	1.18	1,348	35	6,600	52%	No	Non-Profit	0.95	55	7	3
Parkland Medical Center	Derry	Seacoast	3.30	3,767	59	13,149	61%	No	Profit	0.98	28	6	3
Portsmouth Regional Hospital	Portsmouth	Seacoast	5.38	6,136	179	37,297	57%	No	Profit	1.02	35	6	3
So NH Regional Medical Center	Nashua	Southwestern	6.85	7,811	171	24,127	39%	No	Non-Profit	0.90	22	10	7
Speare Memorial Hospital	Plymouth	Central Eastern	0.88	1,005	28	3,382	33%	No	Non-Profit	1.05	41	10	6
St. Joseph Hospital	Nashua	Southwestern	5.24	5,976	135	28,775	58%	No	Non-Profit	1.03	35	3	5
Upper Connecticul Valley Hospital	Colebrook	North Country	0.41	464	20	1,956	27%	No	Non-Profit	0.94	56	13	4
Valley Regional Hospital	Claremont	Central Western	1.59	1,810	43	6,522	42%	No	Non-Profit	0.96	40	17	6
Weeks Memorial Hospital	Lancaster	North Country	0.79	904	38	6,328	46%	No	Non-Profit	0.97	57	11	3
Wentworth-Douglass Hospital	Dover	Seacoast	4.20	4,791	115	17,880	43%	No	Non-Profit	1.07	42	7	4
Unweighted Average			3.82	4,386	98	19,687	48%			1.04	40	10	4
Median			2.44	2,788	63	13,268	52%			0.97	40	10	4
Minimum			0.01	464	20	1,956	22%			0.78	0	3	0
Maximum			15.24	17,373	322	86,671	74%			1.92	57	17	7

NOTE: Occupancy ratio measures the number of beds actually used by admitted patients divided by the number of staffed acute care beds throughout the year.

SOURCE: AHA Annual Survey of Hospitals, 1998. Discharge shares and patient casemix are based on the New Hampshire Hospital Discharge File, 1998.

Table 6-1

New Hampshire Hospitals' Centralized Organizational Structure

Hospital	Is Hospital a Subsidiary of a Holding Company?	Is Hospital Member of a Health Care System?	Is Hospital Member of an Alliance?	Is Hospital Member of a Network?	Does Hospital Operate a Subsidiary?
Alice Peck Day Memorial Hospital	Yes	No	No	No	No
Androscoggin Valley Hospital	Yes	Yes	Yes	Yes	No
Catholic Medical	Yes	No	No	No	No
Cheshire Medical Center	Yes	Yes	Yes	Yes	Yes
Concord Hospital	Yes	Yes	Yes		Yes
Cottage Hospital	No	No	Yes	Yes	No
Elliot Hospital	Yes	No	No	No	No
Exeter Hospital, Inc.	Yes	No	No	No	No
Franklin Regional Hospital	No	No	No	Yes	No
Frisbie Memorial Hospital	No	No	Yes	No	Yes
Huggins Hospital	No	No	No	No	No
Lakes Region General Hospital	No	No	No	Yes	No
Littleton Hospital	No	No	Yes	No	No
Mary Hitchcock Memorial Hospital	Yes	Yes	Yes	No	Yes
Memorial Hospital	No	No	No	No	Yes
Monadnock Community Hospital	No	Yes	No	No	Yes
New London Hospital Assoc.	Yes	Yes	No	No	Yes
Parkland Medical Center	No	Yes	No	No	No
Portsmouth Regional Hospital	Yes	Yes	Yes	No	Yes
So NH Regional Medical Center	Yes	Yes	Yes	Yes	No
Speare Memorial Hospital	No	No	No	No	Yes
St. Joseph Hospital	No	Yes	Yes	No	Yes
Upper Connecticut Valley Hospital	Yes	Yes	Yes	No	No
Valley Regional Hospital	Yes	Yes	Yes	No	No
Weeks Memorial Hospital	No	No	Yes	No	No
Wentworth-Douglass Hospital	No	No	No	No	Yes
Yes/No Counts	13/13	12/14	13/13	6/19	11/15

A holding company is any company that controls the management of one or more companies by virtue of its ownership of securities and/or its right to appoint directors.

A health care system is a corporate body that owns or manages health-related or non-health-related provider facilities, including freestanding facilities and subsidiaries.

An alliance is a formal organization owned by its members that works on behalf of its individual members in the provision of services.

A network is a group of hospitals, physicians, other providers, insurers and/or community agencies that work together to coordinate and deliver a broad range of services to the community.

**SOURCE:** AHA's Annual Survey of Hospitals, 1998

Table 6-2

New Hampshire Hospitals' Physician Practice Affiliations

			]	Does Hospital P	articipate in a:			
Hospital	Independent Practice Association	Group Practice Without Walls'	Open Physician- Hospital Organization	Closed Physician- Hospital Organization	Management Service Organization	Integrated Salary Model	Equity Model	Foundation
Alice Peck Day Memorial Hospital	No	No	Yes	No	No	No	No	No
Androscoggin Valley Hospital	No	No	No	No	No	No	No	Yes
Catholic Medical	No	No	Yes	No	Yes	No	No	No
Cheshire Medical Center	No	No	No	Yes	No	No	No	No
Concord Hospital	No	No	No	No	Yes	Yes	No	No
Cottage Hospital	No	No	Yes	No	No	No	No	No
Elliot Hospital	No	No	Yes	No	Yes	No	No	No
Exeter Hospital, Inc.	No	No	No	Yes	No	No	No	No
Franklin Regional Hospital	No	No	Yes	No	No	No	No	No
Frisbie Memorial Hospital	Yes	No	Yes	No	No	Yes	No	Yes
Huggins Hospital	No	No	Yes	No	No	No	No	No
Lakes Region General Hospital	No	No	Yes	No	No	Yes	No	No
Littleton Hospital	No	No	No	No	No	No	No	No
Mary Hitchcock Memorial Hospital	No	No	No	No	No	No	No	Yes
Memorial Hospital	No	No	No	No	No	No	No	Yes
Monadnock Community Hospital	No	No	No	No	No	No	No	No
New London Hospital Assoc.	No	Νo	Yes	No	No	No	No	No
Parkland Medical Center	No	Νo	No	No	No	No	No	No
Portsmouth Regional Hospital	No	Νo	Yes	Yes	No	Yes	No	No
So NH Regional Medical Center	No	Νo	Yes	No	No	Yes	No	No
Speare Memorial Hospital	No	No	Yes	No	No	No	No	No
St. Joseph Hospital	No	No	Yes	No	No	Yes	No	No
Upper Connecticut Valley Hospital	No	No	No	No	No	No	No	No
Valley Regional Hospital	No	Νo	No	No	Yes	No	No	No
Weeks Memorial Hospital	No	Νo	No	No	No	Yes	No	No
Wentworth-Douglass Hospital	Yes	No	Yes	No	No	No	No	No
Yes/No Counts	2/24	0/26	14/12	3/23	4/22	7/19	0/26	4/22

An independent practice association (IPA) is a legal entity that holds managed care contracts and then contracts with physicians to provide care.

A group practice without walls exists when hospitals sponsor the formation of or provide capital to physicians to establish a quasi group to share administrative expenses while remaining independent practitioners.

A physician-hospital organization (PHO) is a joint venture between a hospital and all members of the medical staff who wish to participate. The PHO can act as a unified agent in managed care contracting, own a managed care plan, own and operate ambulatory care centers or ancillary service projects, or provide administrative services to its physician members.

A management service organization (MSO) is a corporation owned by the hospital or a physician/hospital joint venture that provides management services to one or more medical group practices.

SOURCE: AHA's Annual Survey of Hospitals . 1998

Table 6-3

New Hampshire Hospitals' Sub-Acute Care Provider Affiliations

				Does Hos	pital or Hospit	al's Network	or Health	System O	perate a:			
Hospital	Skilled Nursing Facility	Intermediate Care Facility	Home Health Agency	Long Term Care Facility	Freestanding Outpatient Care Facility	Testing and Imaging Facility	Rehab Facility	Sports Medicine Facility	Hospice Facility	Adult Day Care <u>Facility</u>	Retirement Facility	Assisted Living Facility
Alice Peck Day Memorial Hospital	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	Yes
Androscoggin Valley Hospital	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No
Catholic Medical	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes
Cheshire Medical Center	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No
Concord Hospital	No	No	No	No	Yes	Yes	No	Yes	Yes	No	No	Yes
Cottage Hospital	Yes	Yes	No	No	No	Yes	No	No	No	No	No	No
Elliot Hospital	No	No	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Exeter Hospital, Inc.	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	No	No
Franklin Regional Hospital	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No
Frisbie Memorial Hospital	No	No	No	No	No	Yes	No	Yes	Yes	No	No	No
Huggins Hospital	Yes	No	No	No	No	Yes	No	No	No	Yes	Yes	Yes
Lakes Region General Hospital	No	No	No	No	No	Yes	No	No	Yes	Yes	No	No
Littleton Hospital	No	No	No	No	No	Yes	No	No	Yes	No	No	No
Mary Hitchcock Memorial Hospital	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No
Memorial Hospital	No	Yes	No	No	No	Yes	No	No	No	Yes	No	No
Monadnock Community Hospital	No	No	Yes	No	No	Yes	No	No	Yes	No	No	No
New London Hospital Assoc.	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	No	No
Parkland Medical Center	No	No	No	No	No	Yes	No	No	No	No	No	No
Portsmouth Regional Hospital	No	No	Yes	No	No	Yes	No	No	Yes	No	No	No
So NH Regional Medical Center	No	No	Yes	No	No	Yes	No	Yes	Yes	Yes	No	No
Speare Memorial Hospital	No	No	No	No	No	Yes	No	No	Yes	No	No	No
St. Joseph Hospital	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	No
Upper Connecticut Valley Hospital	No	No	Yes	No	No	Yes	No	No	No	No	No	No
Valley Regional Hospital	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes
Weeks Memorial Hospital	No	No	Yes	No	No	Yes	No	Yes	Yes	No	No	No
Wentworth-Douglass Hospital	No	No	Yes	No	No	Yes	No	Yes	Yes	No	No	No
Yes/No Counts	8/18	7/19	16/10	0/26	6/20	26/0	4/22	12/14	21/5	9/17	3/23	6/20

**SOURCE:** AHA's Annual Survey of Hospitals, 1998

Table 6-5

Managed Care Contracts and Revenue Share by Hospital

Hospital	Does Hospital Contract with an HMO?	Number of HMO Contracts	Does Hospital Contract with a PPO?	Number of PPO Contracts	Does Hospital Have Risk Sharing Contract with Employer Group?	Number of Lives Covered under Capitation	Percent of Net Patient Revenue Capitated	Percent of Net Patient Revenue on a Shared Risk Basis	HMO Share of Discharges
Alice Peck Day Memorial Hospital	Yes	4	Yes	5	No	0	0%	15%	26%
Androscoggin Valley Hospital	Yes	3	No	0	No	0	0%	7%	10%
Catholic Medical	Yes	5	Yes	26	No	27,020	3%	1%	
Cheshire Medical Center	Yes	6	Yes	5	Yes	15,000	19%	19%	19%
Concord Hospital	Yes	4	Yes	21	No	28,000	15%	15%	30%
Cottage Hospital	Yes	6	Yes	12	No	0	0%	10%	11%
Elliot Hospital	Yes	5	Yes	22	No	27,020	4%	2%	34%
Exeter Hospital, Inc.	Yes	6	Yes	4	No	2,500	12%	2%	7%
Franklin Regional Hospital	Yes	3	Yes	15	No	0	0%	12%	19%
Frisbie Memorial Hospital	Yes	4	Yes	10	Yes	4,800	4%	0%	21%
Huggins Hospital	Yes	2	Yes	8	No	0	0%		
Lakes Region General Hospital	Yes	2	Yes	2	No	4,800	5%	20%	18%
Littleton Hospital	Yes	5	Yes	2	No	0	0%	0%	20%
Mary Hitchcock Memorial Hospital	Yes	14	Yes	14	No	7,420	5%	10%	24%
Memorial Hospital	Yes	4	Yes	4	No	0	0%	12%	1%
Monadnock Community Hospital	Yes	2	Yes	6	No	6,000	15%	15%	30%
New London Hospital Assoc.	Yes	2	Yes	3	No	0	4%	0%	13%
Parkland Medical Center	Yes	6	Yes	8	No	1,000	5%	11%	50%
Portsmouth Regional Hospital	Yes		Yes		No	0	0%	0%	38%
So NH Regional Medical Center	Yes	6	Yes	2	No	2,200	5%	20%	27%
Speare Memorial Hospital	Yes	2	Yes	5	No	0	0%	25%	20%
St. Joseph Hospital	Yes	8	Yes	6	No	2,000	2%	10%	37%
Upper Connecticul Valley Hospital	Yes	4	No	0	No	0	0%	0%	1%
Valley Regional Hospital	Yes	6	Yes	3	Yes		0%	1%	5%
Weeks Memorial Hospital	Yes	5	Yes	1	No	0	1%	0%	15%
Wentworth-Douglass Hospital	Yes	5	Yes	32	No	0	0%	1%	24%
Yes/No Counts	26/0		24/2		3/23				
Unweighted Average		5		9		5,110	4%	8%	21%
Median		5		5		0	2%	9%	20%
Minimum		2		0		0	0%	0%	1%
Maximum		14		32		28,000	19%	25%	50%

An '\*' indicates that a hospital owns an equity share in an HMO or PPO.

An HMO is a health maintenance organization.

A PPO is a preferred provider organization.

A risk sharing contract is a payment agreement in which a hospital and a managed care organization share in any losses and profits.

A capitated contract is a fixed payment per enrollee that obligates the hospital to provide a range of services for those enrollees.

**SOURCE:** AHA Annual Survey of Hospitals, 1998 and New Hampshire Hospital Discharge Files, 1998.

Table 7-1

Regional Comparison of Hospital Financial Performance, 1998

State	 Net Revenue/ Discharge		Cost/ Discharge		Profit/ Discharge		rplus/ charge	Operating Margins (%)	Total Margins (%)	
New Hampshire	\$ 6,372	\$	6,404	\$	(32)	\$	478	-0.5	6.9	
Rhode Island	6,255		6,509		(254)		343	-4.1	5.0	
Vermont	6,777		7,052		(276)		180	-4.1	2.6	
Connecticut	6,736		7,055		(319)		337	-4.7	4.0	
Maine	7,624		7,507		117		607	1.5	8.4	
Massachusetts	6,501		7,833		(1,331)		(15)	-20.5	-0.2	
New England Average	6,711		7,060		(349)		322	-5.4	4.5	
United States Average	6,509		6,702		(193)		409	-3.0	5.8	

 $Net\ Revenue = (NPSR\ /\ Outpatient-adjusted\ Discharge)\ /\ (casemix\ index\ x\ (0.28+(0.71\ x\ wage\ index)))$ 

Cost = (Total Expenses / Outpatient-adjusted Discharge) / (casemix index x (0.28 + (0.71 x wage index)))

 $Profit = Net \ Revenue \ \textbf{-} \ Cost$ 

Surplus = (Total Revenue - Total Expenses) / Outpatient-adjusted Discharge

Operating Margins = Profit / Net Revenue

Total Margins = Surplus / Total Revenue

**SOURCE:** AHA Hospital Statistics, 2000 and AHA Annual Survey of Hospitals, 1998.

Table 7-2

Regional Comparison of Payer-Specific Total Margins, 1998

<u>State</u>	Private <u>Payer</u>	<u>Medicare</u>	Medicaid	Uncompensated <u>Care</u>	All <u>Other</u>	Total
New Hampshire	9.7%	-2.0%	-1.5%	-5.1%	5.9%	6.9%
Vermont	13.0	-6.7	-1.1	-4.2	3.0	4.0
Maine	13.1	-6.3	1.7	-4.2	4.6	8.9
Rhode Island	-0.5	3.8	0.5	4.0	5.5	5.3
Connecticut	4.6	0.0	-2.3	-3.3	5.1	4.1
Massachusetts	-3.2	0.9	-1.7	-5.1	8.8	-0.3
New England Average	6.1	-1.7	-0.7	-3.0	5.5	4.8
United States Average	5.5	1.0	-0.2	-5.2	4.9	6.1

Total Margins represent the net gains or losses accruing from each payer divided by the payments from each payer. Uncompensated care payments reflect state and local operating subsidies and include free care and bad debt. All Other category includes other government health programs and non-patient businesses.

**SOURCE:** AHA, *Hospital Statistics*, 1998.

Table 7-4

Performance of New Hamshire Hospitals, 1995-1998: Financial

	Net Revenue/ <u>Discharge</u>	Cost/ Discharge	Profit/ Discharge	Surplus/ Discharge	Operating Margins	Total Margins	Days Cash on Hand	Average Annual Net Revenue <u>Growth</u>	Average Annual Cost Growth
Average	5,226	5,253	206	474	4.1	8.2	240	10	10
Median	4,804	5,016	167	423	3.0	7.5	248	10	11
Minimum	2,172	2,103	(2)	(6)	0.1	0.4	81	-12	-14
Maximum	9,304	9,864	528	1425	13.5	17.2	559	57	51

Parkland Medical and Portsmouth Regional are for-profit hospitals and, as such, are not required to submit annual financial statements to the state.

Net Revenue = (GPSR - Free Care - Bad Debt - Contractuals) / (Outpatient-adjusted Discharges x Casemix Index).

Cost = Total Operating Expenses / (Outpatient-adjusted Discharges x Casemix Index).

Profit = (Net Revenue - Operating Expenses) / (Outpatient-adjusted Discharges x Casemix Index).

Surplus = (Total Revenue - Total Expenses) / (Outpatient-adjusted Discharges x Casemix Index).

 $Operating\ Margins = Net\ Operating\ Revenue\ /\ Total\ Operating\ Revenue.$ 

 $Total\ Margins = Net\ Total\ Revenue\ /\ Total\ Revenue.$ 

Net Revenue and Cost Growth = Average annual change in casemix adjusted average net revenue and cost, 1995-1998.

## **SOURCE:**

New Hampshire Hospital Discharge Files, 1998;

Financial indicators calculated by Dr. Kane from information reported on

New Hampshire Hospital Financial Statements, 1998.

Table 7-6

Performance of New Hamshire Hospitals, 1995-1998: Uncompensated Care

	Average Uncomp. Care/Discharge	Share of Uncomp. Care	Share of Self-Pay Discharges	Operating Margins	Total Margins
Average	411	5.3	5.1	4.1	8.2
Median	405	5.5	4.9	3.0	7.5
Minimum	174	3.2	2.8	0.1	0.4
Maximum	632	8.1	9.7	13.5	17.2

As for-profits, Parkland and Portsmouth Regional are not required to submit annual financial statements. Average Uncomp. Care Spending = (Free Care + Bad Debt) / (Outpatient-adjusted Discharges x Casemix Index). Share of Uncomp. Care Spending = (Free Care + Bad Debt) / GPSR. Share of Self Pay Discharges = (Self Pay Discharges / Total Discharges).

## **SOURCE:**

New Hampshire Hospital Discharge Files, 1998; Financial indicators calculated by Dr. Kane from information reported on New Hampshire Hospital Financial Statements, 1998.

## **PIE CHARTS**

## **Hospital Share of Market Inpatient Admissions, 1997**

Note: Hospital market areas are based on all ZIP codes from which 3% or more of a hospital's admission originate.

From:

Executive Summary - Assessing the Competitiveness of New Hampshire's Health Care Markets: A Focus on Hospitals

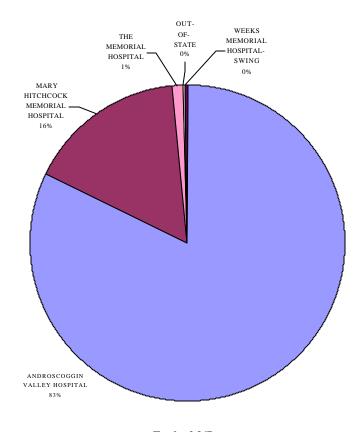
Center for Health Economics Research for the Office of Planning and Research, New Hampshire Department of Health and Human Services; December, 2000

## ALICE PECK DAY MEMORIAL HOSPITAL MARKET\*

# ALICE PECK DAY MEMORIAL HOSPITAL 17% HITCHCOCK MEMORIAL HOSPITAL 78%

Total = 2,704

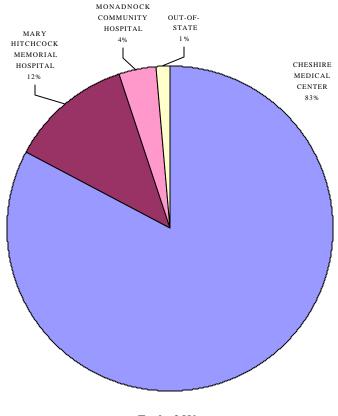
## ANDROSCOGGIN VALLEY HOSPITAL MARKET\*



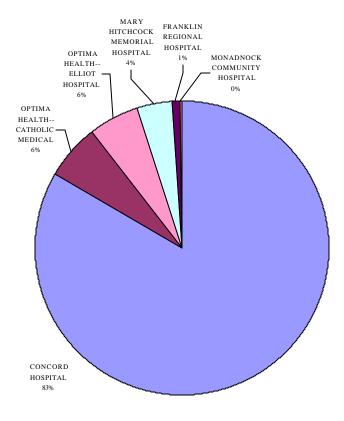
Total = 2,367

## CHESHIRE MEDICAL CENTER MARKET\*

## CONCORD HOSPITAL MARKET\*



Total = 3,880

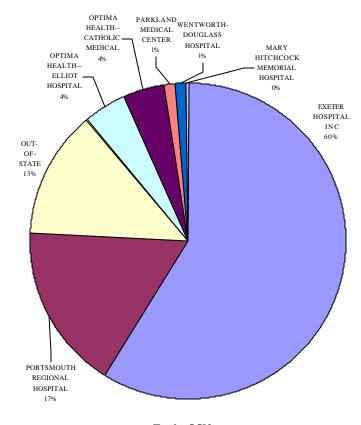


Total = 7,905

## COTTAGE HOSPITAL MARKET\*

## ALICE PECK LITTLETON DAY HOSPITAL MEMORIAL OUT-HOSPITAL OF-0% STATE 4% COTTAGE HOSPITAL MARY нітснсоск MEMORIAL HOSPITAL 42% Total = 1,178

## EXETER HOSPITAL, INC. MARKET\*



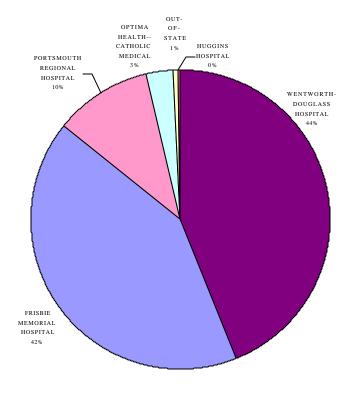
Total = 5,583

## FRANKLIN REGIONAL HOSPITAL MARKET\*

## OPTIMA HEALTH--MEMORIAL MARY CATHOLIC HOSPITAL HITCHCOCK MEDICAL 2% MEMORIAL HOSPITAL FRANKLIN REGIONAL HOSPITAL LAKES REGION GENERAL HOSPITAL CONCORD HOSPITAL-36%

Total = 3,692

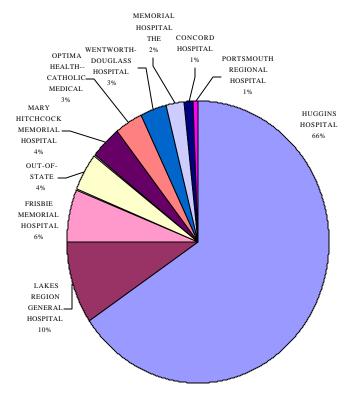
## FRISBIE MEMORIAL HOSPITAL MARKET\*



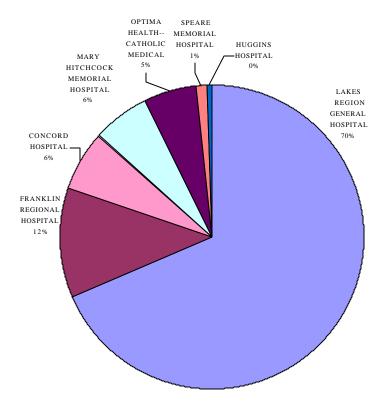
Total = 6,448

## **HUGGINS HOSPITAL MARKET\***

## LAKES REGION GENERAL HOSPITAL MARKET\*



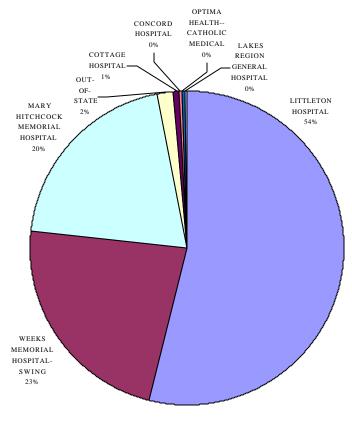
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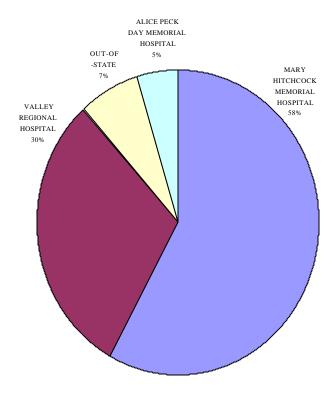
Total = 5,430

## LITTLETON HOSPITAL MARKET\*

## MARY HITCHCOCK MEMORIAL HOSPITAL MARKET\*



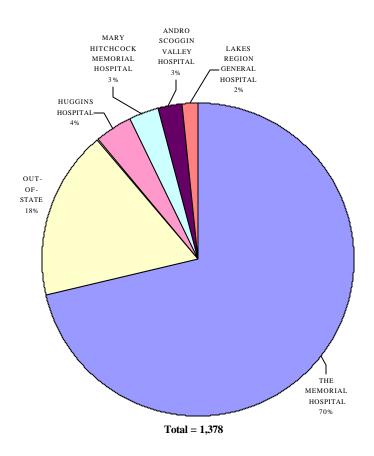
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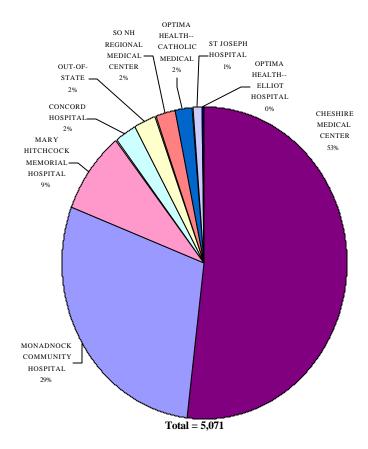


Total = 3,761

## THE MEMORIAL HOSPITAL MARKET\*

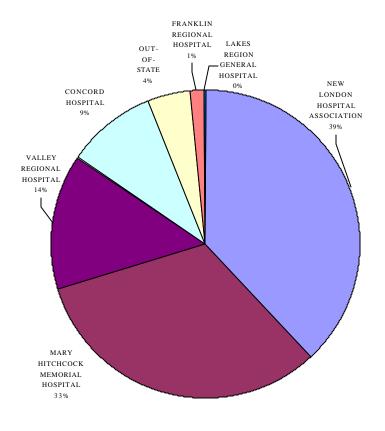
## MONADNOCK COMMUNITY HOSPITAL MARKET\*



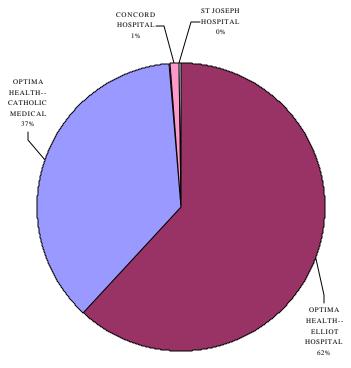


## NEW LONDON HOSPITAL ASSOCIATION MARKET\*

## OPTIMA HEALTH--CATHOLIC MEDICAL MARKET\*



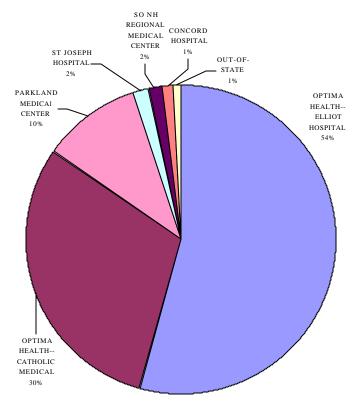
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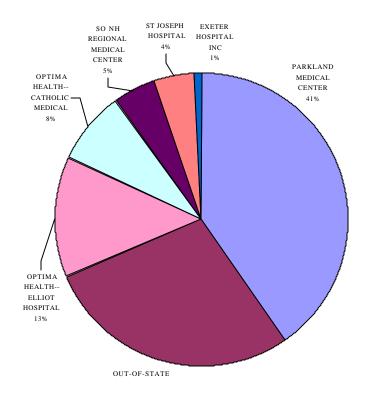
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## OPTIMA HEALTH--ELLIOT HOSPITAL MARKET\*

## PARKLAND MEDICAL CENTER MARKET\*



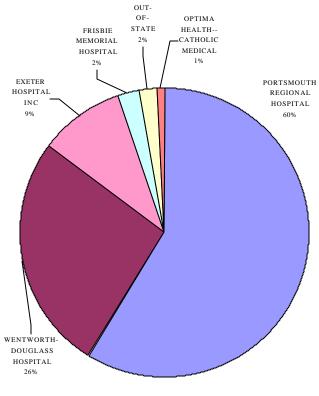
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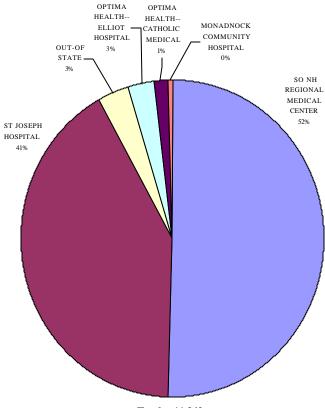
Total = 6,767

## PORTSMOUTH REGIONAL HOSPITAL MARKET\*

## SO NH REGIONAL MEDICAL CENTER MARKET\*



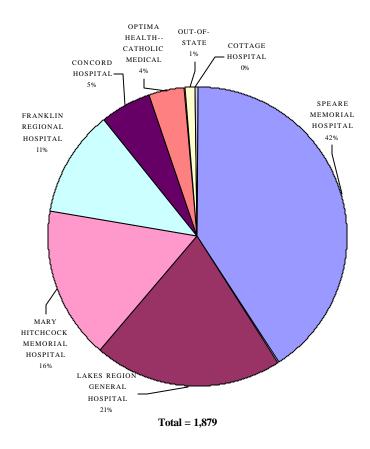
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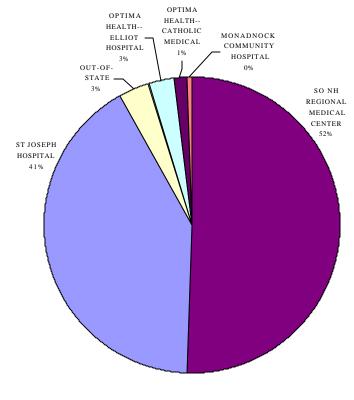


Total = 11,342

## SPEARE MEMORIAL HOSPITAL MARKET\*

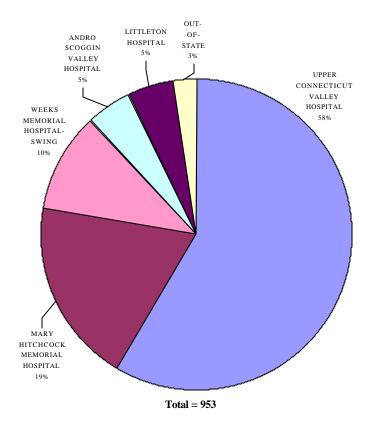
## ST. JOSEPH HOSPITAL MARKET\*

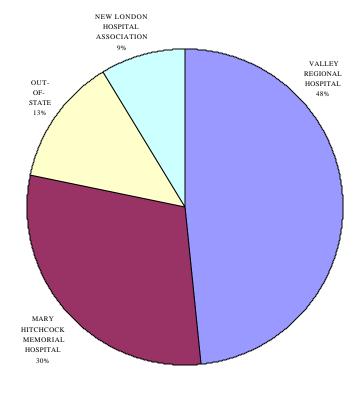




## UPPER CONNECTICUT VALLEY HOSPITAL MARKET\*

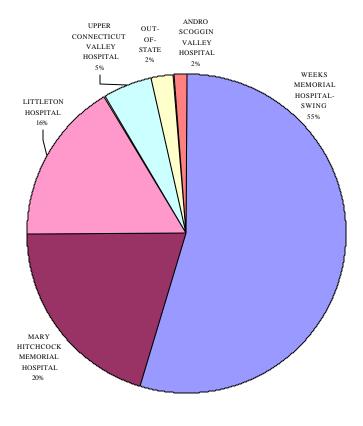
## VALLEY REGIONAL HOSPITAL MARKET\*





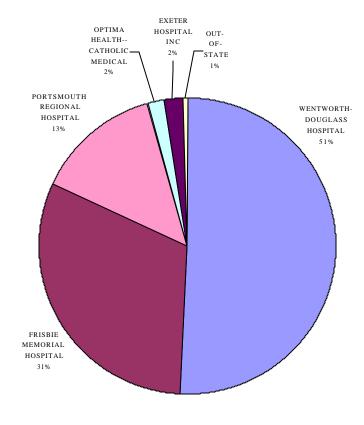
Total = 3,219

## WEEKS MEMORIAL HOSPITAL-SWING MARKET\*



Total = 1,637

## WENTWORTH-DOUGLASS HOSPITAL MARKET\*



Total = 7,095